

**DRAFT**  
**KEY MESSAGES AND TALKING POINTS**  
**LIFTING PARCHMENT MUNICIPAL WATER ADVISORY**

**August 25, 2018**

**Key Messages**

- The drinking water advisory is now lifted for Parchment municipal water.
- If you have flushed your home according to instructions, normal consumption of drinking water for the customers of the Parchment Municipal Water System in both the City of Parchment and Cooper Township may resume for all household purposes.
- The drinking water advisory remains in effect for residents who use wells for their drinking water, pending further testing. All private residential water wells located east of the Kalamazoo River that the MDEQ has tested and received their well results will be provided a point of use filter as part of the MDEQ investigation. HCS in partnership with the Kalamazoo County Plumbers, Pipefitters & HVAC Local 357 will install all PFAS certified filters at no cost to those residents.
- The Michigan Department of Environmental Quality (DEQ) has concluded that the Parchment municipal water system currently meets the requirements of the Safe Drinking Water Act. The perfluoroalkyl and polyfluoroalkyl substances (PFAS) data has been reviewed by Parchment and Kalamazoo city officials, the Kalamazoo County Department of Health and Community Services, and the Michigan Department of Health and Human Services, and the results are acceptable to lift the drinking water advisory.
- Everyone here has been united by one common goal, protecting public health.
- More than 3,000 people served by the Parchment water system were protected through our bottled water distribution program within a matter of hours of discovering high levels of Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) in the Parchment system.
- With the immediate problem addressed, we followed a methodical, science- and engineering-based approach to make sure the flushing of the Parchment system and connection to the Kalamazoo system was achieved without creating unintended consequences. This involved a detailed five-phased plan, which will continue
- Kalamazoo's water continues to meet the stringent requirements of the Safe Drinking Water act and is undergoing extensive testing to ensure it is compatible with the Parchment system.

- Customers of the Parchment municipal water system now have the full force of the Kalamazoo Public Services Department, which serves 125,000 customers, looking after their water supply.
- The Parchment system is stabilized and capable of delivering water to customers that is compliant with Lifetime Health Advisory levels for PFOA and PFOS, with sampling results well below 70 parts per trillion (ppt).
- The most recent tests for PFOA and PFOS have results between 6 and 8 ppt. That is 176 times lower than the contamination of 1410 ppt discovered in July.
- For the next year, Parchment municipal water will be tested for PFAS weekly for the first month and monthly thereafter.
- We will continue to test and monitor the system to ensure water quality meets the safe drinking water act standard.

### **Talking Points**

#### **The Process**

Our monitoring of the Parchment distribution system has gone well beyond just the testing for PFAS compounds and includes parameters such as lead, copper, pH, alkalinity, chloride, sulfate, iron, manganese, disinfection by-products, residual chlorine, residual phosphate and others. Gov. Rick Snyder instituted new Lead and Copper regulations at the state level that go beyond the federal requirements for protecting public health. Part of these new regulations resulted in the additional battery of tests necessary before they Do Not Drink order can be lifted.

#### **PFAS**

Fifty PFAS samples have been taken in the Parchment distribution system since the source water change. The last round of samples taken on August 15, 2018 ranged between 6 ppt and 8 ppt for PFOA and PFOS. The PFOA and PFOS levels in Parchment drinking water are relatively stable and consistently well below the Lifetime Health Advisory level of 70 ppt.

#### **Iron and Manganese**

Water quality parameter results, including iron and manganese, indicate that the system is settling down to background levels after being flushed with Kalamazoo water.

#### **Lead and Copper**

- The flushing of the Parchment system resulted in a rapid change in water and the hook up to the Kalamazoo water supply reversed the direction of water flow in many places. In addition, the change in water direction also created changes in the water pressure in parts of the system. These factors, working together, stirred up particulates within the

system. These particulates may contain lead.

- Parchment completed lead copper compliance monitoring in 2017. The 90<sup>th</sup> percentiles for lead and copper are 9 ppb and 850 ppb, respectively. These values are compared to the action levels for lead—15 ppb, and copper—1300 ppb. In 2017, individual lead results ranged from non-detect to 16 ppb; individual copper results ranged from 40 ppb to 1.0 ppm.  
Current results:
  - Thirty lead and copper samples meeting compliance sampling requirements have been taken since the source change. Of these, three are over the lead action level of 15 parts per billion (ppb) (at 16, 16 & 23 ppb), and one is over the copper action level of 1300 ppb (at 1600 ppb). The most recent test results range from non-detect to 12 ppb.
  - Only samples collected from a kitchen or bathroom sink, collected as a first draw after 6 hours of stagnation meet the compliance sampling requirements. An additional six samples were taken that were not “first draw,” and therefore did not meet the definition of compliance monitoring. One of these samples, at 97 ppb, was taken immediately after the homeowner flushed the line. Subsequent first-draw samples at that home had results that were below the lead action level.
- The City of Kalamazoo has been adding phosphates since 1956 and is actively monitoring and adjusting feed rates of phosphates entering the Parchment System.
- Increased monitoring has been ongoing to ensure that lead levels drop as the system returns to a stable state.
- Because of the lead and copper data received thus far indicates that there are some isolated high levels, out an abundance of caution, additional public education efforts on how to minimize lead exposure will be taken.
- For residents concerned about lead or copper in their drinking water, testing and filters are available through the City of Kalamazoo.

### **The Phased Approach to Bringing the Parchment Water System Back into Service**

Correcting the PFAS contamination issue in Parchment’s municipal water supply system is a multiphase approach and each phase is handled very differently, with very different measurements and indicators of success.

- **Phase 1:** get the PFAS out while maintaining chlorine residuals and pressure in the Parchment municipal water supply system
  - High Pressure Pumps
  - Reversed flow
  - Directional flushing
  - Extremely high hydraulic demand
  - Chlorine residual monitoring
- **Phase 2:** flush out all service lines and plumbing fixtures; residential, commercial, institutional
  - Normal system pressures

- Detailed instructions provided
- Customer service numbers provided and many positive customer experiences
- Extended duration timeline
- Moderate hydraulic demand
- **Phase 3:** balance system hydraulics and focus on water quality parameters (compliance with Michigan Safe Drinking Water Act)
  - Compatibility calculations (completed during phase 1)
  - Water chemistry
  - Twice daily sampling for 14 parameters including color, temperature, pH, orthophosphate, total phosphate, alkalinity, chloride, sulfate, iron, manganese, calcium and hardness parameters throughout the entire system
  - Establish and maintain feedback loops for adjustments
  - Analyze and interpret data, adjust and verify assumptions
- **Phase 4:** optimize corrosion control (component of source change regulations)
  - Lead and copper testing
  - Analyze and interpret data
  - Understand hydraulic components as well as chemistry related components
  - Establish and maintain feedback loops for adjustments
- **Phase 5:** compliance monitoring and long-term compliance plan
  - Establish data trends of all water quality parameters, water chemistry and corrosion control
  - Generate trends and confidence intervals that support compliance
  - Create and establish long term monitoring and sampling plan
  - Continue and increase larger Lead and Copper corrosion control study
  - Compliance and monitoring becomes a routine component as prescribed by the Michigan Safe Drinking Water Act.

## QUESTIONS AND ANSWERS

**Q: I suffered economic losses. Who can I talk to about financial claims?**

A: They DEQ continues to investigate the contamination with the hope of identifying a responsible party.

**Q: Will I be charged for flushing?**

A: No.

**Q: What are PFAS?**

A: PFAS are a large group of manmade chemicals that are heat, water, and oil resistant. They are used in food packaging such as fast food wrappers and microwave popcorn bags. They are also used in waterproof and stain resistant products, some nonstick coatings on pans, some soaps and other personal care products. You may have used products containing PFAS to protect your shoes from water or your furniture from stains.

PFAS can stay in the environment for a long time. They also can build up in people and animals. Most people in the United States have some PFAS in their blood because they are used in so many products.

**Q: How do I know if my water is affected? Can I still get bottled water?**

A: If you live in the area under the drinking water advisory and are on a private well for your drinking water, you can get free bottled water. For the water pickup location, days, and times, visit the Kalamazoo County Health and Community Services (KCHCS) website at [www.kalcounty.com/hcs/pfasresponse.php](http://www.kalcounty.com/hcs/pfasresponse.php). If you can't pick the water up, someone can deliver it to you. Call the Parchment Water Hotline at 269-373-5346 for more information.

If you have your own well and are within 1.5 miles of the City of Parchment's wells, you can also get free bottled water at the Haven Reformed Church. For more information, please call the DEQ District Office at 269-567-3500.

If you get your water from the City of Kalamazoo or the Parchment municipal system, you do not need bottled water. The City of Kalamazoo's water has been tested and is below the EPA lifetime health advisory level.

If you're not sure where your water comes from, check your water bill to see if you're billed by the City of Parchment or Kalamazoo.

**Q: What should I do if I am still being told not to use my water because of PFAS?**

A: Swallowing PFAS is the main way it gets into your body. If you have been told to stop using your water, The Michigan Department of Health and Human Services (MDHHS) and Kalamazoo County Health and Community Services (KCHCS) recommends you use bottled water or a certified point-of-use filter for the following:

- Drinking
- Cooking
- Making baby formula or food
- Washing fruits and vegetables
- Brushing your teeth

Take the same steps for your pets and animals that you take for yourself.

**Q: How long do I need to use bottled water if I'm on a well?**

A: Kalamazoo County Health and Community Services (KCHCS) and Michigan Department of Health and Human Services (MDHHS) recommend you use bottled water until further notice.

Check the KCHCS website, [www.kalcounty.com/hcs/pfasresponse.php](http://www.kalcounty.com/hcs/pfasresponse.php), or Facebook page, [www.facebook.com/KalamazooCountyHCS](https://www.facebook.com/KalamazooCountyHCS) for the latest news. You can also call the Parchment Water Hotline at 269-373-5346 for updates if you can't get online.

**Q: Is it okay to shower, bathe, or touch my well water?**

A: Yes. Touching water that has PFAS is okay. PFAS do not move easily through the skin. It's okay to bathe, shower, wash clothes, and clean with your water.

**Q: Is it okay to breastfeed if my water has PFAS ?**

A: Yes, the health benefits of breastfeeding for your baby outweigh the risks of PFAS. It is recommended you continue to breastfeed your baby.

If you have questions, please talk to your doctor.

**Q: I use formula for my baby, what should I do?**

A: Use bottled water to make baby formula.

Women, Infant and Children (WIC) clients can call the WIC office at 269-349-2647 with questions.

**Q: How long has PFAS been in my water?**

A: It's unknown and may be impossible to know how long PFAS has been in your water. The Michigan Department of Environmental Quality (DEQ) found PFAS in the City of Parchment's water supply on Thursday, July 26. This is part of a proactive effort the State of Michigan is taking to test all public drinking water in Michigan.

**Q: Why is there PFAS in the water?**

A: The exact source of PFAS in the water in Parchment is not currently known. Local, state, and federal agencies are working to learn more about where the PFAS came from, but it will take time. Information will be shared as more is learned.

**Q: I have my own well outside of the current investigation area. Can I have it tested?**

A: The Michigan Department of Environmental Quality (DEQ) is testing some private wells. If your well is one that will be tested, there is no cost to you for the test. The DEQ will contact you to request access to your home and to collect a water sample.

**Q: Can I test my own well water?**

A: Testing for PFAS is not easy. PFAS are found in many products. The amount of PFAS being tested for in water is very small. People who sample water for PFAS are trained to make sure they don't accidentally get PFAS into your water sample.

**Q: What is the impact on the Kalamazoo River?**

A: At this time, the impact to the Kalamazoo River is not known. Fish from the Kalamazoo River were tested for PFAS in 2013. Although PFOS (a type of PFAS) was found in the fish, the "Eat Safe Fish" guidelines for this part of the river are because of polychlorinated biphenyls (PCBs). To learn more about the "Eat Safe Fish" guidelines for the Kalamazoo River, please visit [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish) or call 1-800-648-6942.

**Q: What kind of filter should I get?**

A: NSF International (NSF) has certified some filtration systems that reduce PFAS in drinking water. They are point-of-use filters, the kind that hook up to your kitchen sink. If you're looking for a filter, be sure it has the P473 certification. This is the certification showing the filter has been tested and proven to reduce two of the PFAS chemicals, PFOA and PFOS. You can go to the NSF website, [www.nsf.org](http://www.nsf.org), and search for PFAS or P473 to learn more about filtration systems that have been certified.

Your refrigerator or portable filter will not remove PFAS. Only filters with the P473 NSF certification have been certified to reduce the amount of PFOA and PFOS in water.

It's important to follow the manufacturer's recommendations for maintaining your filter.

**Q: I have a reverse osmosis filter. Does it remove PFAS?**

A: The State of Minnesota did a study and found that some reverse osmosis filtration systems did reduce the amount of PFAS in water. The study was done before the P473 certification became available. If you have a reverse osmosis filter, it may be reducing the amount of PFAS in your water, but that isn't certain.

**Q: How will new information be provided to me?**

A: Check the Kalamazoo County Health and Community Services (KCHCS) website, [www.kalcounty.com/hcs/pfasresponse.php](http://www.kalcounty.com/hcs/pfasresponse.php), or Facebook page, [www.facebook.com/KalamazooCountyHCS](https://www.facebook.com/KalamazooCountyHCS), for the latest news. You can also call 269-373-5346 for updates if you can't get online.

**Q: Can PFAS harm my health?**

A: No one can say for sure if drinking water with PFAS will harm you. Some health studies found health problems linked to PFAS such as:

- Decreased chance of a woman getting pregnant
- Increased chance of high blood pressure in pregnant women
- Increased chance of thyroid disease
- Increased cholesterol levels
- Changed immune response
- Increased chance of cancer, especially kidney and testicular cancers

Studies in animals help us understand what could happen in people. Animals given high amounts of PFOA and PFOS (types of PFAS), showed:

- Harm to the liver
- Harm to the body's ability to fight off sickness
- Birth defects, slow growth, and newborn death

**Q: Why are words like “maybe,” and “potential,” or “relationship” and “association” used when describing health effects and PFAS?**

A: These words reflect the current science on PFAS. Both animal and human studies have provided data on how PFAS might affect health. These studies have also provided recommendations on how to protect health. As more information becomes available on PFAS and health, the recommendations will be updated.

**Q: What does lifetime health advisory mean?**

A: The Environmental Protection Agency (EPA) has set a lifetime health advisory number for two types of PFAS in drinking water. Those two are perfluorooctanoic acid, or PFOA, and perfluoro octane sulfonate, or PFOS. If the total amount of PFOA and PFOS added together is below 70 parts per trillion, also called ppt, no harm is expected from these chemicals.

The EPA has not set lifetime health advisory levels for the other PFAS chemicals. PFAS is considered an emerging contaminant. This means scientists are still learning more about them, and more research is needed about the possible harm to human health and the environment.

**Q: How do I have my, or my child’s, blood tested?**

A: If you’re thinking about having your blood tested for PFAS, talk to your doctor.

Blood tests are available that can measure the amount of PFAS in your blood at the time it’s collected. The blood test cannot tell you how much PFAS was in your blood in the past. It cannot tell you if PFAS has or will cause a medical condition.

Because PFAS has been so widely used in many different products, most people in the United States have some amount of PFAS in their blood, especially PFOA and PFOS. There is no medical treatment to remove PFAS from blood.

**Q: What about other lab testing?**

A: Laboratory tests cannot tell you if PFAS exposure caused your health condition. Some of the health conditions that are linked to PFAS exposure, like high cholesterol and thyroid levels, can be checked as part of a health check-up and conversation with your doctor.

**Q: Can I eat fruits/vegetables from my garden that’s been watered with contaminated water?**

A: The Michigan Department of Agriculture and Rural Development (MDARD) recommends you do not eat fruits and vegetables from your garden that were watered with City of Parchment water. At this time, there is not enough scientific information to know how PFAS can affect garden plants.

Fruits or vegetables that were processed with City of Parchment water should be thrown away. If you’re canning vegetables or fruits, and your water has PFAS, use bottled water rather than your tap water.

**Q: What about my pets/animals?**

A: The Michigan Department of Agriculture and Rural Development (MDARD) recommends you use the same drinking water guidelines for pets that you are using for yourself. If you’re using bottled water for yourself and your family, use it for your pets and animals, too.



If you have questions about your pet's health, please contact your veterinarian.

**Q: Where can I get more information?**

A:

- Call the Parchment drinking water hotline: 269-373-5346.
- For health questions, call the Kalamazoo County Health Department at 269-373-5200 or the Michigan Department of Health and Human Services at 800-648-6942.
- Visit [www.kalcounty.com/hcs/pfasresponse.php](http://www.kalcounty.com/hcs/pfasresponse.php).
- Follow the Kalamazoo County Health & Community Services Facebook page, [www.facebook.com/KalamazooCountyHCS/](https://www.facebook.com/KalamazooCountyHCS/).
- Visit [www.michigan.gov/pfasresponse](http://www.michigan.gov/pfasresponse) for more about Michigan's response to PFAS.
- Visit [www.atsdr.cdc.gov/pfas](http://www.atsdr.cdc.gov/pfas) for more information about PFAS.